

### Amendments to the Claims:

1. **(Currently Amended)** A symbol position detection device detecting a position for a symbol of a data signal transmitted based on a first clock signal having a predetermined frequency, the device comprising:

high frequency clock signal generation means for generating a second clock signal having a frequency of an integral multiple of a frequency of the first clock signal;

data value acquisition means for acquiring a data value of the data signal based on timing of the second clock signal generated by the high frequency clock signal generation means;

clock component extraction means for extracting a component of the first clock signal from the data value acquired by the data value acquisition means;

zero cross detection means for detecting, as a zero cross point, a timing at which a magnitude relationship with respect to a predetermined criterion level inverted for the component of the first clock signal extracted by the clock component extraction means; and

symbol position detection means for detecting, as a symbol position of the data signal, a time when a time period corresponding to a predetermined number of clocks for the second clock signal is elapsed from the zero cross point detected by the zero cross detection means[.], wherein

the zero cross detection means detects, as the zero cross point, a clock whose position corresponding to a timing closest to the timing at which the magnitude relationship with respect to the predetermined criterion level is inverted for the first clock component extracted by the clock component extraction means.

2. **(Original)** The symbol position detection device according to claim 1, wherein the data signal is a signal in which the magnitude relationship with respect to the predetermined criterion level is alternately inverted from symbol to symbol.

### Claim 3 **(Cancelled)**

4. **(Currently Amended)** The symbol position detection device according to claim 3, wherein the zero cross detection means compares an absolute value of a data value for a clock immediately before and an absolute value of a data value for a clock immediately after the timing

at which the magnitude relationship between the data value and the predetermined criterion level is inverted for the first clock component extracted by the clock component extraction means, and determines that the clock of which the absolute value of the data value is the smaller is a clock whose position corresponding to a timing closest to the timing at which the magnitude relationship with respect to the predetermined criterion level is inverted.

5. **(Original)** The symbol position detection device according to claim 1, wherein the clock determined as being at a position of the symbol in the data signal by the symbol position detection means is at a timing at which the predetermined number of clocks is passed from the zero cross point.

6. **(Original)** The symbol position detection device according to claim 1, wherein the symbol position detection means outputs a third clock signal with a timing when the symbol position is detected.

7. **(Original)** The symbol position detection device according to claim 6, wherein the zero cross detection means outputs the third clock signal when the time period corresponding to the predetermined number of clocks is elapsed from the zero cross point.

8. **(Original)** The symbol position detection device according to claim 7 further comprising determination means for determining a data value of the symbol in the data signal, based on timing of the third clock signal outputted by the symbol position detection means.

9. **(Original)** The symbol position detection device according to claim 8 further comprising:

output clock signal generation means for generating a low jitter fourth clock signal; and  
output means for externally outputting the data value determined by the determination means, based on the fourth clock signal generated by the output clock signal generation means.

Claim 10 **(Canceled)**

11. **(Original)** The symbol position detection device according to claim 1, wherein the zero cross detection means detects, as the zero cross point, the timing at which the "positive" /"negative" sign of the first clock signal component is inverted.

12. **(Original)** The symbol position detection device according to claim 11, wherein the data signal is a signal in which the "positive"/"negative" sign of the data value is alternately inverted from symbol to symbol.

13. **(Original)** The symbol position detection device according to claim 9, wherein output clock generation means generates the fourth clock signal on the basis of the third clock signal.

14. **(Original)** The symbol position detection device according to claim 1, wherein the integer is a multiple of four.

15. **(Original)** The symbol position detection device according to claim 5, wherein  
the integer is a multiple of four; and  
the predetermined number of clocks is a number of clocks in which the number is obtained by multiplying one-fourth with the multiple of four.

16. **(Currently Amended)** A symbol position detection method for detecting a position of a symbol in a data signal transmitted based on a first clock signal having a predetermined frequency, the method comprising:

a high frequency clock signal generation step of generating a second clock signal having a frequency of an integral multiple of a frequency of the first clock signal;

a data value acquisition step of acquiring a data value of the data signal based on timing of the second clock signal generated by the high frequency clock signal generation step;

a clock component extraction step of extracting a data value acquired by the data value acquisition step or a component of the first clock signal;

a zero cross detection step of extracting, as a zero cross point, a timing at which a magnitude relationship with respect to a predetermined criterion level is inverted for the first clock signal extracted by the clock component extraction means; and

a symbol position detection step of detecting, as a symbol position of the data signal, a time when a time period corresponding to a predetermined number of clocks for the second clock signal is elapsed from the zero cross point detected by the zero cross detection step[.], wherein

the zero cross detection step detects, as the zero cross point, a clock whose position corresponding to a timing closest to the timing at which the magnitude relationship with respect to the predetermined criterion level is inverted for the first clock component extracted by the clock component extraction means.

17. **(Original)** The symbol position detection method according to claim 16, wherein the data signal is a signal in which the magnitude relationship with respect to the predetermined criterion level is alternately inverted from symbol to symbol.